WHAT IS CLAIMED IS:

1. An optical system comprising an auto focus camera having an object plane, a close up lens coupled to the auto focus camera, a structure coupled to the close up lens and auto focus camera that is capable of being coupled to an imaging optical system having an image plane so that the image plane of the imaging optical system is coincident with the object plane of the auto focus camera.
2. An optical system according to claim 1 wherein the said structure is a C-mount.
3. An optical system according to claim 1 wherein the auto focus camera has a sensor having a size not greater than about ¼".
4. An optical system according to claim 1 wherein the auto focus camera has a focal length of at least 60 mm.
5. An optical system according to claim 1 wherein the auto focus camera has a focal length of at least 70 mm.
6. An optical system according to claim 1 wherein the auto focus camera has a sensor having a size not greater than about ¼" and a focal length of at least 60 mm.
7. The combination comprising an auto focus camera having an object plane, a close up lens coupled to the auto focus camera, an imaging optical system having an image plane, a structure coupling the close up lens and auto focus camera to said imaging optical system so that the image plane of the imaging optical system are in coincidence with the object plane of the auto focus camera.
8. An optical system according to claim 7 wherein the said structure is a C-mount.
9. An optical system according to claim 1 wherein the auto focus camera has a sensor having a size not greater than about ¼".
10. An optical system according to claim 7 wherein the auto focus camera has a focal length of at least 60 mm.
11. An optical system according to claim 7 wherein the auto focus camera has a focal length of at least 70 mm.

12. An optical system according to claim 7 wherein the auto focus camera has a sensor having a size not greater than about ¼" and a focal length of at least 60 mm.

13. An optical system according to claim 7 wherein the imaging optical system is selected from the class consisting of video microscopes, zoom microscopes and CCTV lens.

14. An inspection system comprising: a lens operative to image light, from a portion of interest in an object undergoing inspection, at an image plane of the lens; an optical assembly including an auto focus camera having an object plane, a close up lens coupled to the auto focus camera, and a structure coupled to the close up lens and auto focus camera; and said structure also being coupled to the lens so that the image plane of the lens is coincident with the object plane of the auto focus camera.

15 An inspection system according to claim 14 wherein the said structure is a C-mount.

16. An inspection system according to claim 14 wherein the auto focus camera has a sensor having a size not greater than about ¼".

17. An inspection system according to claim 14 wherein the auto focus camera has a focal length of at least 60 mm.

18. An inspection system according to claim 14 wherein the auto focus camera has a focal length of at least 70 mm.

19. An inspection system according to claim 14 wherein the auto focus camera has a sensor having a size not greater than about ¼" and a focal length of at least 60 mm.

20. An inspection system according to claim 14 wherein the lens is selected from the class consisting of video microscopes, zoom microscopes and CCTV lens.

21. An inspection system according to claim 14 wherein the object undergoing inspection is a printed circuit board.

22. An inspection system according to claim 14 wherein the object of interest is an integrated circuit.

23. An inspection system according to claim 14 wherein the object of interest is a microchip.